

0 0.05 0.1 0.2 0.3 0.4 Kilometers

SCALE: 1:3,590



WATER DISTRICT: NWD

PRECINCT: 20G-Hope

MAP NUMBER: 92.H.033.4.4

FILE: A2005721

WORKS DESC: Bridge Construction

STREAM NAME: Coquihalla River

CLIENT: District of Hope

Structure/Dwelling: ■

Approval: ▲

Powerhouse: ■

Works or Penstock: - - - - -

PCL:

Indian Reserve: ■

Active Water Licence: ●

Active Application: ●

Inactive Water Licence: ●

Point of Diversion: ●

Map Prepared by: Kym Johnson

Date: March 22, 2010

APPROVAL

WATER ACT - Subsection 9(1), Clauses (a), (b) and (c)
(Changes in and about a stream)

Hatfield Consultants on behalf of District of Hope

is hereby authorized to make changes in and about a stream as follows:

- (a) The name of the stream is Coquihalla River, herein referred to as "the stream".
- (b) The changes to be made in and about the stream are:

To construct a new bridge and associated road works upstream of the existing Kawkawa Lake Road Bridge; to construct a temporary clean rock berm; and to remove the existing bridge over Coquihalla River, within Kawkawa Lake Road Right of Way shown on Plan KAP 7362, District of Hope, Yale Division Yale District.
- (c) This Approval does not authorize entry on privately held land or Crown land.
- (d) This Approval does not constitute authority of any other agency. The holder of this Approval shall have the necessary permits from other agencies concerned prior to the commencement of the works authorized herein.
- (e) The holder of this Approval shall take reasonable care to avoid damaging any land, works, trees, or other property and shall make full compensation to the owners for any damage or loss resulting from the exercise of rights granted hereunder.
- (f) The work authorized shall be completed on or before December 30, 2011, and the holder of this Approval shall advise the Water Information Technician (604-582-5200) when the changes have been completed.
- (g) A copy of this Approval (and associated plans/drawings listed on this Approval) must be available for inspection, upon request, at any location where the authorized changes in and about a stream are being undertaken.
- (h) Allan Jonsson, Fisheries and Oceans Canada (604-666-0226) and Scott Barrett, Environmental Stewardship Division (604-582-5229), shall be notified 5 working days prior to commencement of construction/in-stream work.
- (i) All in-stream work shall be undertaken during the period authorized by the Fisheries and Oceans Canada.

- (j) Upon commencement of the project, the work shall be pursued to completion as quickly as possible.
- (k) Care shall be exercised during all phases of the work to minimize siltation of the stream and to eliminate the release of any other debris or deleterious substances.
- (l) All excavated material and debris shall be removed from the site or placed in a stable area above the high water mark of the stream and protected from erosion by planting grass and/or vegetation.
- (m) Rock used as rip-rap shall be clean, durable, angular in shape and suitably graded and sized to resist movement by stream flow.
- (n) Where possible, site preparation and construction of the bridge works is to be carried out from the banks of the stream, thus minimizing disturbance to the stream.
- (o) All works shall comply with Figure 1 "Hope and surrounding area" and Environmental Drawings: "Riparian Restoration Area Following Demolition of Old Bridge Structures – Kawkawa Lake Road Bridge" Drawing No. 5009255-52-ENV-3 and "Permanent Riparian and Aquatic Impact Areas" Drawing No. 5009255-52-ENV-2, all prepared by Hatfield Consultants, and Kawkawa Lake Road Bridge Drawings: "Site Plan" Drawing No. 5009255-051 Rev. B; "N.W.P.A Application Layout" Drawing No. 5009255-SK-01 Rev. A; "Detail Design Profile" Drawing No. 5009255-016 Rev. B; "Location of Temporary Access Bern" Drawing No. 5009255-52-ENV-1; "Piling Layout and Details" Drawing No. 5009255-055 Rev. B; "General Notes" Drawing No. 5009255-054 Rev. B; "General Arrangement" Sheet 1 of 2 Drawing No. 5009255-052 Rev. B; "General Arrangement" Sheet 2 of 2, Drawing No. 5009255-053 Rev. B; "Detail Design Drainage and Utilities" Drawing No. 5009255-030 Rev. B; "Detail Design Profile" Drawing No.'s 5009255-015 Rev. B & 5009255-017 Rev. B, all prepared by MMM Group.
- (p) All temporary works shall be removed on completion of the project.
- (q) The holder of this Approval shall be responsible for the repair, operation and maintenance of works to the satisfaction of the Assistant Regional Water Manager.
- (r) Prior to commencement of the works authorized under this Approval, the holder of this Approval shall obtain authorization under Section 35.2 of the Federal Fisheries Act from Fisheries and Oceans Canada.
- (s) Prior to commencement of the works authorized under this Approval, the holder of this Approval shall obtain approval under Navigable Water Protection Act from Transport Canada.
- (t) The holder of this Approval shall retain a qualified Environmental Monitor to supervise all in-stream works authorized under this Approval. In the event of an environmental incident or non-compliance with any of the terms or conditions of this Approval, the Environmental Monitor shall notify the Assistant Regional Water Manager (604 582-5200), within 24 hours.

- (u) All work shall be carried out in accordance with the Ministry of Environment's "Standards and Best Practices for In-stream Works" and the appropriate Fisheries and Oceans Canada guidelines. The Ministry's guidance can be found at the following link:
<http://www.env.gov.bc.ca/wld/documents/bmp/iswstdsbpsmarch2004.pdf>.
- (v) Within 30 days of the completion of all works authorized by this Approval, the holder of this Approval shall submit the as-built drawings of all permanent works to the Water Stewardship Officer, Water Stewardship Division, Ministry of Environment.



Tim Bennett, P.Eng.
Assistant Regional Water Manager

File No.: **A2005721** Date Issued: **May 26, 2010**
Precinct: **20G - Hope**

Approval No.: **2005721**



Water Act

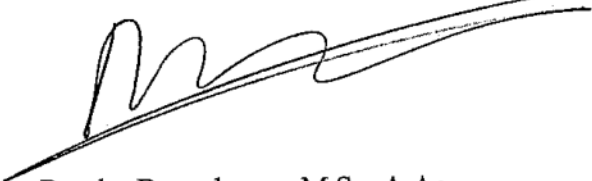
ORDER WATER ACT Section 18 (4)

File No. A2005721

The Province of British Columbia *Water Act* having received an application for an extension of time to allow the completion of works, and being satisfied that no person's rights will be injuriously affected, I hereby amend Clause (f) of the Approval 2005721 to read as follows:

- (f) The work authorized shall be completed on or before October 30, 2012, and the holder of this Approval shall advise the Water Information Technician (604-586-5640) when the changes have been completed.

Dated at Surrey, BC this 1st day of October, 2012.



Remko Rosenboom M.Sc, A.Ag
Assistant Regional Water Manager

APPROVAL

WATER ACT - Subsection 9(1), Clauses (a), (b) and (c)
(Changes in and about a stream)

**DISTRICT OF HOPE
PO BOX 609
HOPE BC V0X 1L0**

is hereby authorized to make changes in and about a stream as follows:

- (a) The name of the stream is **COQUIHALLA RIVER (WATERCRESS CREEK)**, herein referred to as "the stream".

- (b) The changes to be made in and about the stream are:

TO INSTALL A BRIDGE WITH TWO PIERS WITHIN UNSURVEYED FORESHORE OR LAND COVERED BY WATER BEING PART OF THE BED OF COQUIHALLA RIVER WITHIN THE DISTRICT OF HOPE RIGHT OF WAY ADJACENT TO KAP 58595 LOT "A", YALE DIVISION OF YALE DISTRICT.

- (c) This Approval does not authorize entry on privately held land or Crown land.
- (d) This Approval does not constitute authority of any other agency.
- (e) The holder of this Approval shall take reasonable care to avoid damaging any land, works, trees, or other property and shall make full compensation to the owners for any damage or loss resulting from the exercise of rights granted hereunder.
- (f) The work authorized shall be completed on or before **DECEMBER 31, 2007**, and the holder of this approval shall advise the Regional Manager 604 582-5218 when the changes have been completed.
- (g) All instream work shall be undertaken during low flows.
- (h) Upon commencement of the project, the work shall be pursued to completion as quickly as possible.
- (i) Any machinery operated in the stream shall be free of excess oil and grease.
- (j) Care shall be exercised during all phases of the work to prevent siltation of the stream and to eliminate the release of any other debris or deleterious substances.
- (k) Vegetation along the banks of the stream shall be disturbed as little as possible.
- (l) All excavated material and debris shall be removed from the site or placed in a stable area above the high water mark of the stream and protected from erosion by planting grass and/or vegetation.

Ministry of
Environment

Water Stewardship Division
Management and Standards Branch

Mailing Address/Location:
**10470 - 152 Street
Surrey BC V3R 0Y3
Telephone: 604 582-5200
Fax: 604 930-7119**

Web Address:
<http://www.env.gov.bc.ca>

- (m) On completion of the project, the stream bed shall be left in as smooth a condition as possible, with no depressions that could trap fish or initiate erosion of the stream bed.
- (n) Only equipment necessary for the actual installation of the bridge is to traverse the stream.
- (o) All works shall comply with **DRAWING NO. PO1588-01 TO PO1588-08, prepared by KLOHN CRIPPEN BERGER CONSULTING ENGINEERS.**
- (p) Approval holder shall be responsible for repair, operation and maintenance of works to the satisfaction of the Regional Manager.
- (q) Prior to carrying out any maintenance of the works authorized under this approval, the holder is to obtain the consent of the Regional Manager.



Bob Herath P. Eng.
A/Regional Water Manager

File No.: A2005309
Precinct: HOPE

Date Issued: JULY 27, 2006

Approval No.: 2005309

ENGINEER'S REPORT ON AN APPROVAL APPLICATION
(changes in and about a stream)

Water District: New Westminster Precinct: Hope File No: A2005309
Applicant: District of Hope Att: C.C. Patrick Ehnes, Scott Resources Services Inc
Address: P.O. Box 609 Hope B.C. V0X 1L0 31856 Silverdale Ave. Mission B.C. V2K 2K9
Name of stream(s): Coquihalla River (Watercress Ck.) Tributary to: Fraser River

I recommend that the Application be: **granted**

Proposed Changes (include Works and Appurtenant Land)

- ✓ Installation of a bridge with two piers within unsurveyed foreshore or land covered by water being part of the bed of Coquihalla river within the District of Hope R/W adjacent to KAP58595 Lat "A" Yale District.

✓ *Conditions under which Approval is:*
Reasons why the Approval is to be: granted.

- ✓ # 1 December 31st. 2007
✓ # 6
✓ # 7
✓ # 8
✓ # 10
✓ # 13
✓ # 14
✓ # 26
✓ # 33
✓ # 41 Dwg. No. P01588-01 to P01588-08 Kohn Crippen Berger Consulting Engineers.
✓ # 46
✓ # 48

Report made by: **Mohammed Alam**
~~Sr. Water Allocation Technician~~

(signed)

Head, Water Allocation Section
Engineer

Date Site Inspected: Not Inspected

(signed)

Mal

Date: July 26, 2006

Date: _____

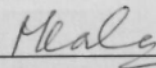
Referrals/Consultation:

Person/Agency	Date of Response	Comments
Fish, Wildlife & Habitat Protection (copy with covering letter):	No	No objection Mike Willcox
Fisheries & Oceans (copy with covering letter):	No	No comments referral sent on June 12th., 2006 to Vince Busto by us and also by applicant on April 28th., 2006.
Municipality/Regional District (copy with covering letter):	No	Applicant
Land Administration Section (copy with covering letter):	No	No objection
Coast Guard (copy with covering letter):	No	No comments No objection.
Engineering Section (copy with covering letter):	No	No comments
(bank protection clause in covering letter):	No	N/A
OTHER (specify):		Archaeological potential of subject property is low. Archaeo Research Ltd.

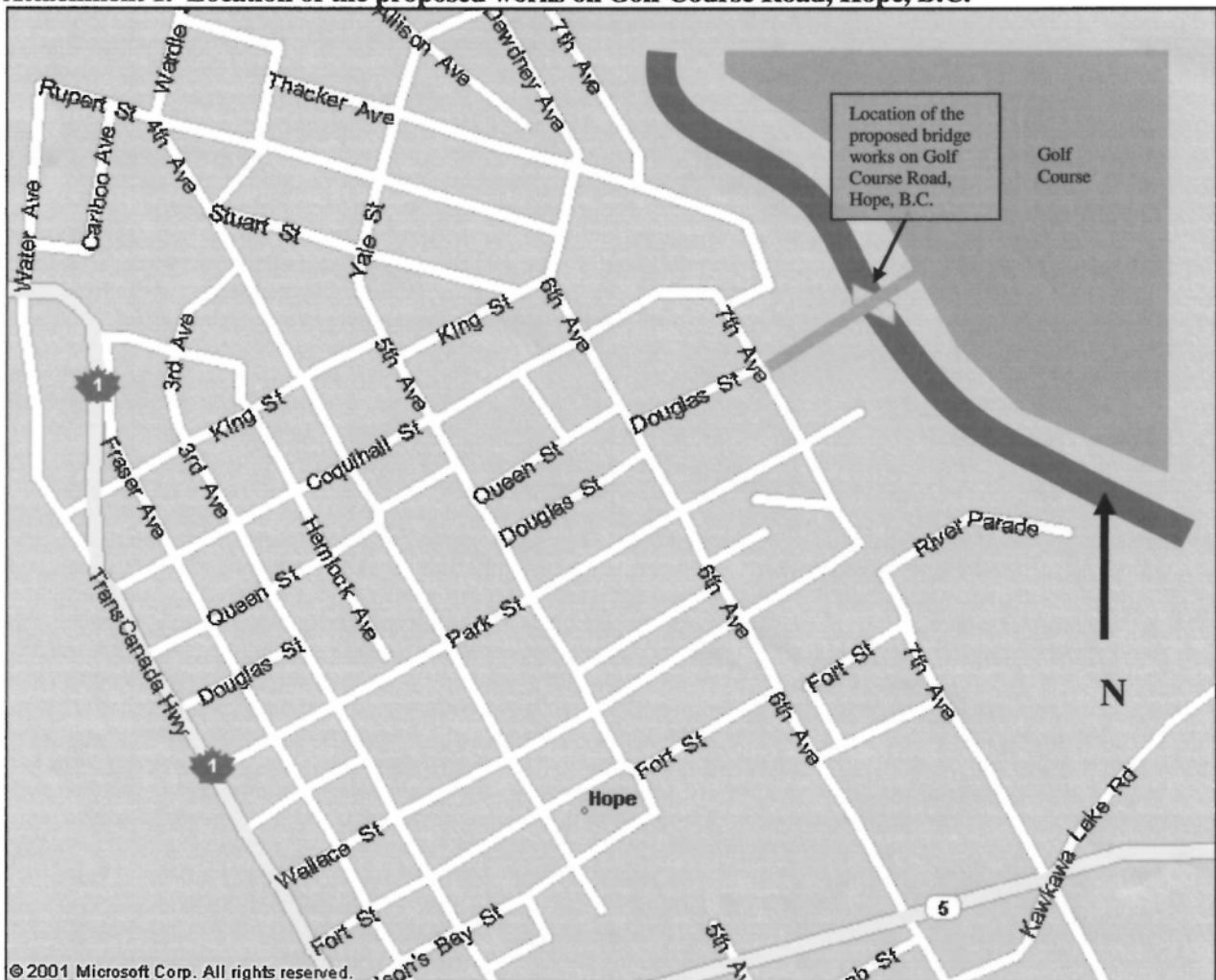
Notes: (include reasons for refusal or cancellation):

The District of Hope has recently received a Community Development Initiatives Grant from B.C. Govt., to partially fund replacement of the existing bridge structure located on Golf Course Road in Hope B.C. To make up the funding shortfall, the District has partnered with Emil Anderson Construction and the Hope Golf Course to share equally the additional construction costs. Currently, the bridge structure can not support large public safety vehicles e.g. fire trucks, in the event of an emergency. The proposed bridge will handle all vehicles big and small. The drawings of the bridge are in file.

P.C.L. Required

yes ☐no ☒

 Signature

Attachment 1. Location of the proposed works on Golf Course Road, Hope, B.C.



Province of British Columbia
MINISTRY OF SUSTAINABLE RESOURCE MANAGEMENT
WATER MANAGEMENT
10470 152 STREET
SURREY BC V3R 0Y3

APPROVAL

WATER ACT - Subsection 9(1), Clauses (a), (b) and (c)
(Changes in and about a stream)

BC Gas Utility Limited
16705 Fraser Highway
Surrey, British Columbia, V2S 2X7
is hereby authorized to make changes in and about a stream as follows:

- (a) The name of the stream is **Coquihalla River**, herein referred to as "the stream".
- (b) The changes to be made in and about the stream are:

To replace the 60mm diameter temporary gas line with a permanent 114mm diameter gas line and to remove and replace rock rip rap bank protection within Ministry of Transportation Kawkawa Lake Road right-of-way.
- (c) This Approval does not authorize entry on privately held land or Crown land.
- (d) This Approval does not constitute authority of any other agency.
- (e) The holder of this Approval shall take reasonable care to avoid damaging any land, works, trees, or other property and shall make full compensation to the owners for any damage or loss resulting from the exercise of rights granted hereunder.
- (f) The work authorized shall be completed on or before **September 15, 2001**, and the holder of this approval shall advise the Engineer for the New Westminster Water District (Phone: 582-5200), when the changes have been completed.
- (g) Sylvia Letay, Habitat Technician, BC Environment, Phone: (604) 795-8433, shall be notified 5 working days prior to commencement of construction/instream work.
- (h) Work within the wetted perimeter of the stream shall be undertaken during the period **August 1 to September 15, 2001**, so that the fisheries interests are protected.
- (i) All instream work shall be undertaken during low flows.
- (j) Upon commencement of the project, the work shall be pursued to completion as quickly as possible.
- (k) Any machinery operated in the stream shall be free of excess oil and grease.
- (l) Care shall be exercised during all phases of the work to prevent siltation of the stream and to eliminate the release of raw concrete, concrete leachate, and any other debris or deleterious substances.
- (m) Vegetation along the banks of the stream shall be disturbed as little as possible.
- (n) All disturbed areas of the banks of the stream shall be restored to their original condition and protected from erosion.
- (o) Site preparation and construction of the works is to be carried out from the banks of the stream, thus minimizing disturbance to the stream.
- (p) All works shall comply to drawing entitled "Bridge Crossing- Kawkawa Lake Rd. & Union Bar Rd., Hope" prepared by BC Gas.

- (q) Approval holder shall be responsible for repair, operation and maintenance of works to the satisfaction of the Regional Water Manager, Lower Mainland Region.
- (r) Prior to carrying out any maintenance of the works authorized under this approval, the holder is to obtain the consent of the Engineer for the New Westminster Water District, Phone 582-5200.



Marc Zubel, P.Eng.
A/Assistant Regional Water Manager

File No: **A2004993**

Date Issued: **July 19, 2001**

Approval No: **2004993**

Precinct: **Hope**

ENGINEER'S REPORT ON AN APPROVAL APPLICATION
(changes in and about a stream)

Water District: New Westminster Precinct: Hope File No: A2004993
Applicant: BC Gas Utility Ltd Att: Keith Tarasenko
Address: 16705 Fraser Highway, Surrey, B.C. V2S 2X7
Name of stream(s): Coquihalla River Tributary to: Fraser River

I recommend that the Application be: *granted*

Proposed Changes (include Works and Appurtenant Land)

To replace the 60 mm dia temporary gas line with a permanent 114 mm dia gas line and to remove and replace rock rip rap bank protection within Ministry of Transportation Kawkawa Lake Road right-of-way.

Conditions under which the Approval is to be: *granted*.

#1 - September 15, 2001.

#3 - Sylvia Letay, (604) 795-8433.

#4 - August 1 to September 15, 2001.

#6, #7, #8

#11 - change the word minimize to prevent.

#13, #15, #18,

4/ #42 - drawing entitled "Bridge Crossing - Kawkawa Lake Rd. & Union Bar Rd., Hope", BC Gas

#46

#48

Report made by: **Barry Paterson**
Fish Protection Officer

(signed) *f*

Valerie Z. Cameron
Valerie Z. Cameron, P. Geo.
Assistant Regional Water Manager
Engineer

Date Site Inspected: familiar with site

(signed) *Barry Paterson*

Date: July 19, 2001

Date: _____

Referrals/Consultation:

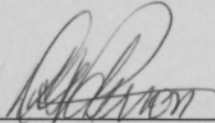
Person/Agency	Date of Response	Comments
Fish, Wildlife & Habitat Protection (copy with covering letter):	July 14, 2001 Yes	Comments on file
Fisheries & Oceans (copy with covering letter):	No	Defer to EPP - Joint review
Municipality/Regional District (copy with covering letter):	No	No response (Appears no referral sent)
Land Administration Section (copy with covering letter):	No	n/a
Coast Guard (copy with covering letter):	No	n/a
Engineering Section (copy with covering letter):	June 22, 2001 No	Comments on file
(bank protection clause in covering letter):	No	

OTHER (specify):

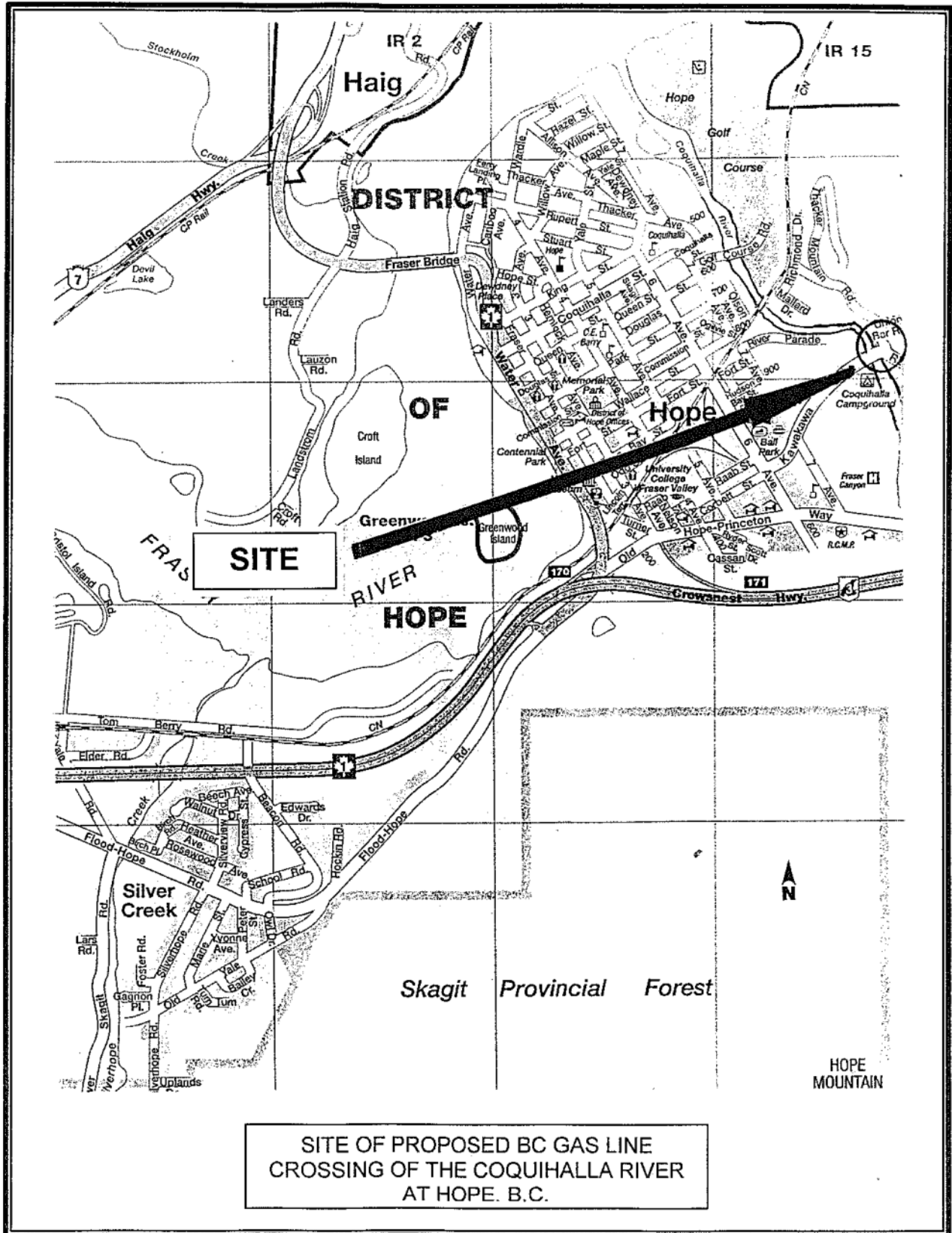
Notes: (include reasons for refusal or cancellation):

The existing temporary gas line is exposed to potential vandalism and there is a need to replace it with a permanent line. The line will be tucked in under the bridge rather than hanging off the side as it presently is.

P.C.L. Required

yes ☐no ☒
Signature

SITE LOCATION



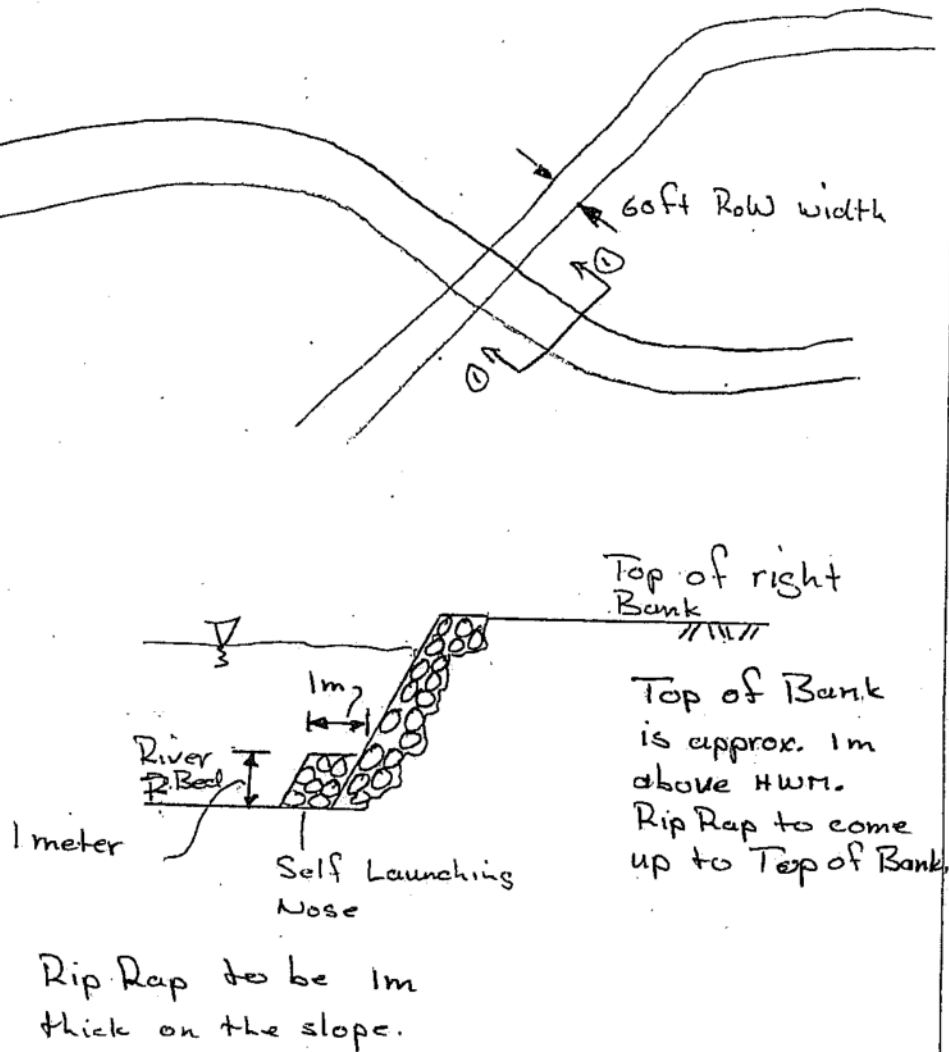


Province of
British Columbia

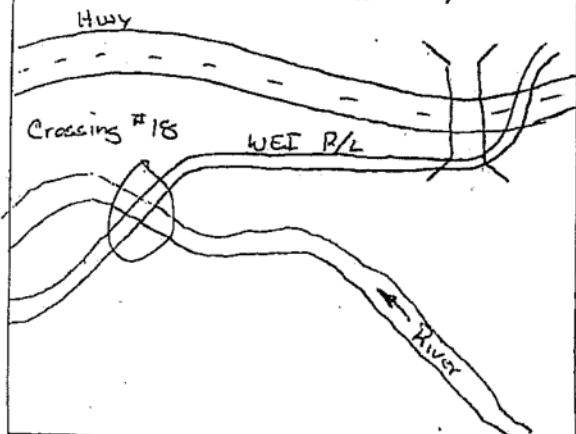
Ministry of Environment,
Lands and Parks
Water Management Branch

SITE PLAN

A2-4581



LOCATION MAP Shyllock O.P.



WESTCOAST ENERGY, INC.
(Name of applicant)

AUGUST 2, 1996
(Date)

Mike Bell
(Signature of applicant)

FOR MIKE BELL

Province of British Columbia
MINISTRY OF ENVIRONMENT, LANDS AND PARKS
WATER MANAGEMENT
10334 152A STREET
SURREY BC V3R 7P8

APPROVAL

WATER ACT - Subsection 7(1), Clauses (b), (c) and (d)
(Changes in and about a stream)

Westcoast Energy Inc
3985 - 22nd Avenue
PRINCE GEORGE BC V2N 1B7

is hereby authorized to make changes in and about a stream as follows:

- (a) The name of the stream is **Coquihalla River**, herein referred to as "the stream".
- (b) The changes to be made in and about the stream are:

to construct rock riprap bank protection works within Westcoast Energy Inc right-of-way located in Section 19, Township 6, Range 24, West of the Sixth Meridian, Yale Division Yale District.
- (c) This Approval does not authorize entry on privately held land or Crown land.
- (d) This Approval does not constitute authority of any other agency.
- (e) The holder of this Approval shall take reasonable care to avoid damaging any land, works, trees, or other property and shall make full compensation to the owners for any damage or loss resulting from the exercise of rights granted hereunder.
- (f) The work authorized shall be completed on or before **September 30, 1996**, and the holder of this approval shall advise the Engineer for the New Westminster Water District (Phone: 582-5200), when the changes have been completed.
- (g) All instream work shall be undertaken during low flows.
- (h) Upon commencement of the project, the work shall be pursued to completion as quickly as possible.
- (i) Care shall be exercised during all phases of the work to minimize siltation of the stream and to eliminate the release of any other debris or deleterious substances.
- (j) Vegetation along the banks of the stream shall be disturbed as little as possible.
- (k) All excavated material and debris shall be removed from the site or placed in a stable area above the high water mark of the stream and protected from erosion by planting grass and/or vegetation.
- (l) All disturbed areas of the banks of the stream shall be restored to their original condition and protected from erosion.
- (m) Site preparation and construction of the works is to be carried out from the banks of the stream, thus minimizing disturbance to the stream.
- (n) Rock used as rip-rap shall be clean, durable, angular in shape and suitably graded and sized to resist movement by stream flow.
- (o) Where rock rip-rap is used to protect against erosion, it is recommended that it be placed as shown on the attached Schedule B, as a minimum standard.
- (p) The works shall be located as shown on the sketch submitted with the application.



.../2

- (q) Approval holder shall be responsible for repair, operation and maintenance of works to the satisfaction of the Regional Water Manager, Lower Mainland Region.
- (r) Prior to carrying out any maintenance of the works authorized under this approval, the holder is to obtain the consent of the Engineer for the New Westminster Water District, Phone 582-5200.



N.J. Peters, P.Eng.
Regional Water Manager
Lower Mainland Region

BROKEN ROCK RIPRAP SPECIFICATIONS

HEAVY RIPRAP

SI METRIC UNITS

IMPERIAL UNITS

% BY WEIGHT FINER THAN	MASS (kg)	APPROX. EQUIVALENT DIAMETER (mm)	% BY WEIGHT FINER THAN	MASS (lb.)	APPROX. EQUIVALENT DIAMETER (inches)
100	1100	900	100	2400	36
NOT MORE THAN 50	300	600	NOT MORE THAN 50	660	24
NOT MORE THAN 10	40	300	NOT MORE THAN 10	90	12

mm = MILLIMETRE

1000 mm = 1 m (METRE) = 3.28 FEET

kg = KILOGRAM

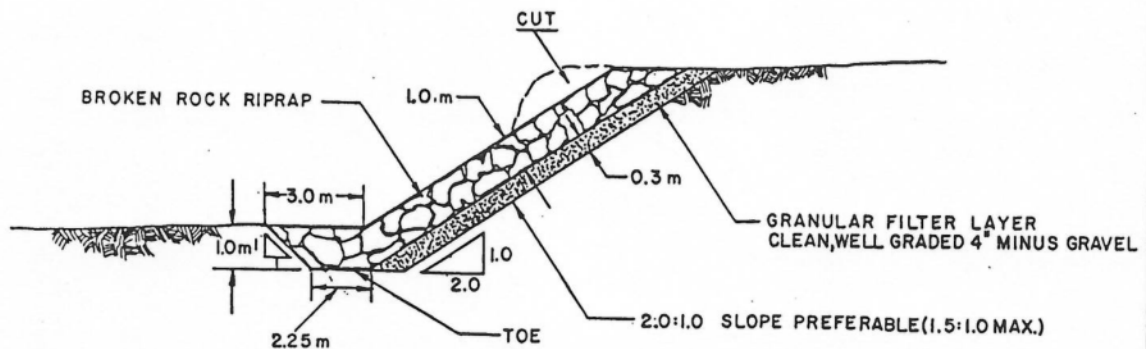
1 kg = 2.2 lb.

ROCK RIPRAP SHALL:

1. CONSIST OF DENSE, DURABLE, ROUGHLY EQUIDIMENSIONAL, ANGULAR PIECES.
2. BE CLEAN AND REASONABLY WELL GRADED COVERING THE COMPLETE ALLOWABLE SIZE RANGE FOR EVERY LOAD LEAVING THE QUARRY.
3. BE FREE FROM CRACKS, SEAMS AND OTHER DEFECTS THAT WOULD TEND TO INCREASE UNDULY ITS DETERIORATION FROM NATURAL CAUSES.
4. BE FREE OF OBJECTIONABLE QUANTITIES OF DIRT, SAND, CLAY AND ROCK FINES.
5. BE SHAPED SUCH THAT NEITHER THE BREADTH NOR THICKNESS OF ANY INDIVIDUAL PIECE SHALL BE LESS THAN ONE THIRD OF ITS LENGTH. THIN, FLAT PIECES WILL NOT BE PERMITTED.

RIPRAP PLACEMENT:

1. ROCK RIPRAP SHALL BE PLACED IN SUCH A MANNER AS TO PRODUCE A REASONABLY WELL GRADED MASS OF ROCK WITH THE MINIMUM PRACTICABLE PERCENTAGE OF VOIDS.
2. NO ROCK SHALL PROTRUDE MORE THAN TWELVE (12) INCHES ABOVE THE LINES AND GRADES SHOWN.
3. THE FINISHED RIPRAP SHALL BE FREE FROM OBJECTIONABLE POCKETS OF SMALL STONES AND/OR CLUSTERS OF LARGER STONES.



TYPICAL SECTION

NOT TO SCALE



Province of British Columbia
Ministry of the Environment
WATER MANAGEMENT BRANCH

TO ACCOMPANY APPROVAL NO. 2004581

TYPICAL BANK PROTECTION

SCALE: NOT TO SCALE.

DRAWN BY *KE*

Robert A. Edwards, P. Eng.

ENGINEER

FILE NO. A2004581

SCHEDULE B

Province of British Columbia
MINISTRY OF ENVIRONMENT, LANDS AND PARKS
LAND & WATER MANAGEMENT
10470 152 STREET
SURREY BC V3R 0R3

APPROVAL

WATER ACT - Subsection 9(1), Clauses (a), (b) and (c)
(Changes in and about a stream)

Westcoast Energy Inc
PO Box 1150
HOPE BC V0X 1L0

is hereby authorized to make changes in and about a stream as follows:

- (a) The name of the stream is **Coquihalla River**, herein referred to as "the stream".
- (b) The changes to be made in and about the stream are:

To construct rock riprap bank protection works within the Westcoast Energy Inc right-of-way within Northeast ¼ Section 19, Township 6, Range 24, West of the Sixth Meridian, Yale Division of Yale District
- (c) This Approval does not authorize entry on privately held land or Crown land.
- (d) This Approval does not constitute authority of any other agency.
- (e) The holder of this Approval shall take reasonable care to avoid damaging any land, works, trees, or other property and shall make full compensation to the owners for any damage or loss resulting from the exercise of rights granted hereunder.
- (f) The work authorized shall be completed on or before **September 15, 1998**, and the holder of this approval shall advise the Engineer for the New Westminster Water District (Phone: 582-5200), when the changes have been completed.
- (g) Work within the wetted perimeter of the stream shall be undertaken during the period **August 31 to September 1, 1998**, so that the fisheries interests are protected.
- (h) All instream work shall be undertaken during low flows.
- (i) Upon commencement of the project, the work shall be pursued to completion as quickly as possible.
- (j) All proposed work shall be completed in isolation of the stream flows.
- (k) Care shall be exercised during all phases of the work to prevent siltation of the stream and to eliminate the release of any other debris or deleterious substances.

- (l) All excavated material and debris shall be removed from the site or placed in a stable area above the high water mark of the stream and protected from erosion by planting grass and/or vegetation.
- (m) All disturbed areas of the banks of the stream shall be restored to their original condition and protected from erosion.
- (n) Site preparation and construction of the works is to be carried out from the banks of the stream, thus minimizing disturbance to the stream.
- (o) Rock used as rip-rap shall be clean, durable, angular in shape and suitably graded and sized to resist movement by stream flow.
- (p) All works shall comply to drawing No's. 2, 3 and 4 entitled "Existing Conditions and Proposed Design Rock Revetment 36" Loopline Crossing Coquihalla River MP 580.5", prepared by Westcoast Energy.
- (q) Approval holder shall be responsible for repair, operation and maintenance of works to the satisfaction of the Regional Water Manager, Lower Mainland Region.
- (r) Prior to carrying out any maintenance of the works authorized under this approval, the holder is to obtain the consent of the Engineer for the New Westminster Water District, Phone 582-5200.

Verbal approval given on August 31, 1998 to proceed with the construction of the works subject to the conditions reached at the on site inspection on August 31, 1998


D. Barry Paterson
Assistant Regional Water Manager

ENGINEER'S REPORT ON AN APPROVAL APPLICATION
(changes in and about a stream)

Water District: New Westminster Precinct: Hope File No: A2004801
Applicant: Westcoast Energy Inc Att: Colin Gagne
Address: PO Box 1150, Hope, BC V0X 1L0
Name of stream(s): Coquihalla River Tributary to: Fraser River

I recommend that the Application be: *granted*

Proposed Changes (include Works and Appurtenant Land)

To construct rock riprap bank protection works within the Westcoast Energy Inc right-of-way within
Northeast ¼ Section 19, Township 6, Range 24, West of the Sixth Meridian, Yale Division of Yale District

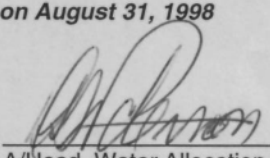
Conditions under which the Approval is to be: *granted*.

- #1 - September 15, 1998
- #4 - August 31 to September 1, 1998
- #6
- #7
- #9
- #10 - change word minimize to prevent
- #14
- #15
- #18
- #24
- #41 - drawing No's. 2, 3 and 4 entitled "Existing Conditions and Proposed Design Rock Revetment 36"
Loopline Crossing Coquihalla River MP 580.5", Westcoast Energy
- #46
- #48

***Verbal approval given on August 31, 1998 to proceed with the construction of the works
subject to the conditions reached at the on site inspection on August 31, 1998***

Report made by: **Barry Paterson**

(signed)


A/Head, Water Allocation Section
Engineer

Date Site Inspected: August 31, 1998

(signed) _____

Date: September 3, 1998

Date: SEPT. 3/98

Referrals/Consultation:

Person/Agency	Date of Response	Comments
Fish, Wildlife & Habitat Protection (copy with covering letter):	August 31, 1998 Yes	See letter on file
Fisheries & Oceans (copy with covering letter):	No	Defer comments to F&W
Municipality/Regional District (copy with covering letter):	July 27, 1998 No	No concerns
Land Administration Section (copy with covering letter):	No	n/a
Coast Guard (copy with covering letter):	No	n/a
Engineering Section (copy with covering letter):	No	n/a
(bank protection clause in covering letter):	No	n/a

OTHER (specify):

Notes: (include reasons for refusal or cancellation):

An on site inspection was carried out on August 31, 1998 with Mike Bell and Colin Gagne, Westcoast Energy and Peter Caverhill, Sylvia Letay and Barry Paterson, MOELP.

Because of the urgency to complete the work and get out of the stream by September 1st, conditions were agreed to in order for the works to be completed on time. The conditions for the most part were habitat related and involved the revegetation of the bank.

Approximately 4 feet of bank has been lost at this location and the concern is that the line could become exposed at some stage. The work is within the right-of way and a key trench constructed at the upper end to prevent flows from getting behind the bank protection works.

P.C.L. Required

yes ☐no ☒_____
Signature

Province of British Columbia
MINISTRY OF ENVIRONMENT, LANDS AND PARKS
WATER MANAGEMENT
10334 152A STREET
SURREY BC V3R 7P8

APPROVAL

WATER ACT - Subsection 7(1), Clauses (b), (c) and (d)
(Changes in and about a stream)

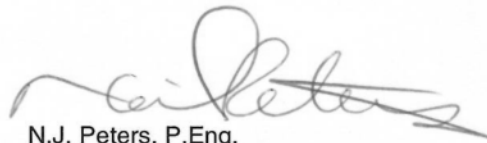
District of Hope
325 Wallace Street
HOPE BC V0X 1L0

is hereby authorized to make changes in and about a stream as follows:

- (a) The name of the stream is **Coquihalla River and Silverhope Creek**, herein referred to as "the stream".
- (b) The changes to be made in and about the stream are:

to construct rock riprap bank protection works and to repair existing bank protection works within Crown land located at various sites in Township 5, Range 26, West of the Sixth Meridian, Yale Division Yale District.
- (c) This Approval does not authorize entry on privately held land or Crown land.
- (d) This Approval does not constitute authority of any other agency.
- (e) The holder of this Approval shall take reasonable care to avoid damaging any land, works, trees, or other property and shall make full compensation to the owners for any damage or loss resulting from the exercise of rights granted hereunder.
- (f) The work authorized shall be completed on or before **September 15, 1997**, and the holder of this approval shall advise the Engineer for the New Westminster Water District (Phone: 582-5200), when the changes have been completed.
- (g) The Fishery Officer in charge of the Fraser Valley east sub-district office, Phone: 792-1995, shall be notified prior to commencement of construction activities.
- (h) Work within the wetted perimeter of the stream shall be undertaken during the period **July 15 to September 15, 1996 or 1997**, so that the fisheries interests are protected.
- (i) Upon commencement of the project, the work shall be pursued to completion as quickly as possible.
- (j) Any machinery operated in the stream shall be free of excess oil and grease.
- (k) All proposed work shall be completed in isolation of the stream flows.
- (l) Care shall be exercised during all phases of the work to prevent siltation of the stream and to eliminate the release of any other debris or deleterious substances.
- (m) Vegetation along the banks of the stream shall not be disturbed.
- (n) Rock used as rip-rap shall be clean, durable, angular in shape and suitably graded and sized to resist movement by stream flow.
- (o) On completion of the project, the stream bed shall be left in as smooth a condition as possible, with no depressions that could trap fish or initiate erosion of the stream bed.

- (p) All works shall comply to Drawing No.'s NHCV 2328-007 to 009 inclusive along with sketches showing the bank protection repair work site locations, prepared by Northwest Hydraulic Consultants.
- (q) Prior to undertaking further maintenance or restoration of the works adjacent to the Hope golf course as authorized under this approval, the approval holder shall make application to make a change in and about a stream as required under Section 37(3) of the Regulations.
- (r) Prior to carrying out any other maintenance of the works authorized under this approval, the holder is to obtain the consent of the Engineer for the New Westminster Water District, Phone 582-5200.



N.J. Peters, P.Eng.
Regional Water Manager
Lower Mainland Region

Verbal authorization to commence mobilization was given on September 6, 1996.

File No: A2004569

Date Issued: September 11, 1996

Approval No: 2004569

Precinct: Hope

ENGINEER'S REPORT ON AN APPROVAL APPLICATION
(changes in and about a stream)

Water District: New Westminster Precinct: Hope File No: A2004569
Applicant: District of Hope Att: Scott Misumi
Address: 325 Wallace Street, Hope BC V0X 1L0
Name of stream(s): Coquihalla River and Silverhope Tributary to: Fraser River
Creek

I recommend that the Application be: *granted*

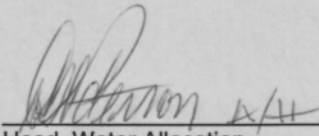
Proposed Changes (include Works and Appurtenant Land)
to construct rock riprap bank protection works and to repair existing bank protection works within Crown
Land located at various sites in Township 5, Range 26, West of the Sixth Meridian, Yale Division Yale
District

Conditions under which the Approval is to be: *granted*.

- #1 - September 15, 1997
 - #3 - change to The Fishery Officer in charge of the Fraser valley east sub-district office, telephone No.
792-1995, shall be notified prior to commencement of construction activities.
 - #4 - July 15 to September 15, 1996 or 1997
 - #7
 - #8
 - #9
 - #10 - change the word minimize to prevent
 - #13 - change the word be to not and remove "as little as possible"
 - #24
 - #26
 - #41 - Drawing No.'s NHCV 2328 -007 to 009 inclusive along with sketches showing the bank protection
repair work site locations, Northwest Hydraulic Consultants
 - #46 - change to Any further maintenance or restoration works authorized under this approval with
respect to works adjacent to the Hope golf course shall require the approval holder to make
application to make a change in and about a stream as required under Section 37 (3) of the
Regulations
 - #48 - add the word other between any and maintenance
- Verbal approval given to commence mobilization on September 6, 1996

Report made by: **Barry Paterson**
Sr. Water Allocation Technician

(signed)


Head, Water Allocation

Section

Engineer

Date Site Inspected: familiar with the sites

(signed)

Date: September 10, 1996

Date:

SEPT. 10/96

Referrals/Consultation:

Person/Agency	Date of Response	Comments
Fish & Wildlife (copy with covering letter):	No	comments deferred to DFO
Fisheries & Oceans (copy with covering letter):	September 9, 1996 Yes	see letter on file
Municipality/Regional District (copy with covering letter):	No	n/a - applicant
Crown Lands (copy with covering letter):	No	n/a
Coast Guard (copy with covering letter):	No	n/a
Engineering Section (Water Mgt) (copy with covering letter):	August 19, 1996 No	see letter on file
(bank protection clause in covering letter):	No	

OTHER (specify):

Notes: (include reasons for refusal or cancellation):

Various sites along the banks of the Coquihalla River and Silverhope Creek suffered minimal to major damage during the November, 1995 flood event. The applicant intends to do the rock work this year with the gravel removal put on hold until possibly next year. It may not be done at all. Concerns with the gravel berm in the floodway across from the hospital will also have to be addressed.

It was made clear to Scott Misumi, District of Hope that the proposed work at the golf course would not establish the bank in it's present location as permanent. Any further erosion would have to be addressed under a new application that would deal with the encroachment into the river. Scott said that was the understanding he thought was brought up at the site meeting but would like something in writing. The comments from DFO mention this.

Due to the time constraints and once the fisheries agencies were satisfied with the intent of the approval, verbal approval was given to start mobilizing the equipment.

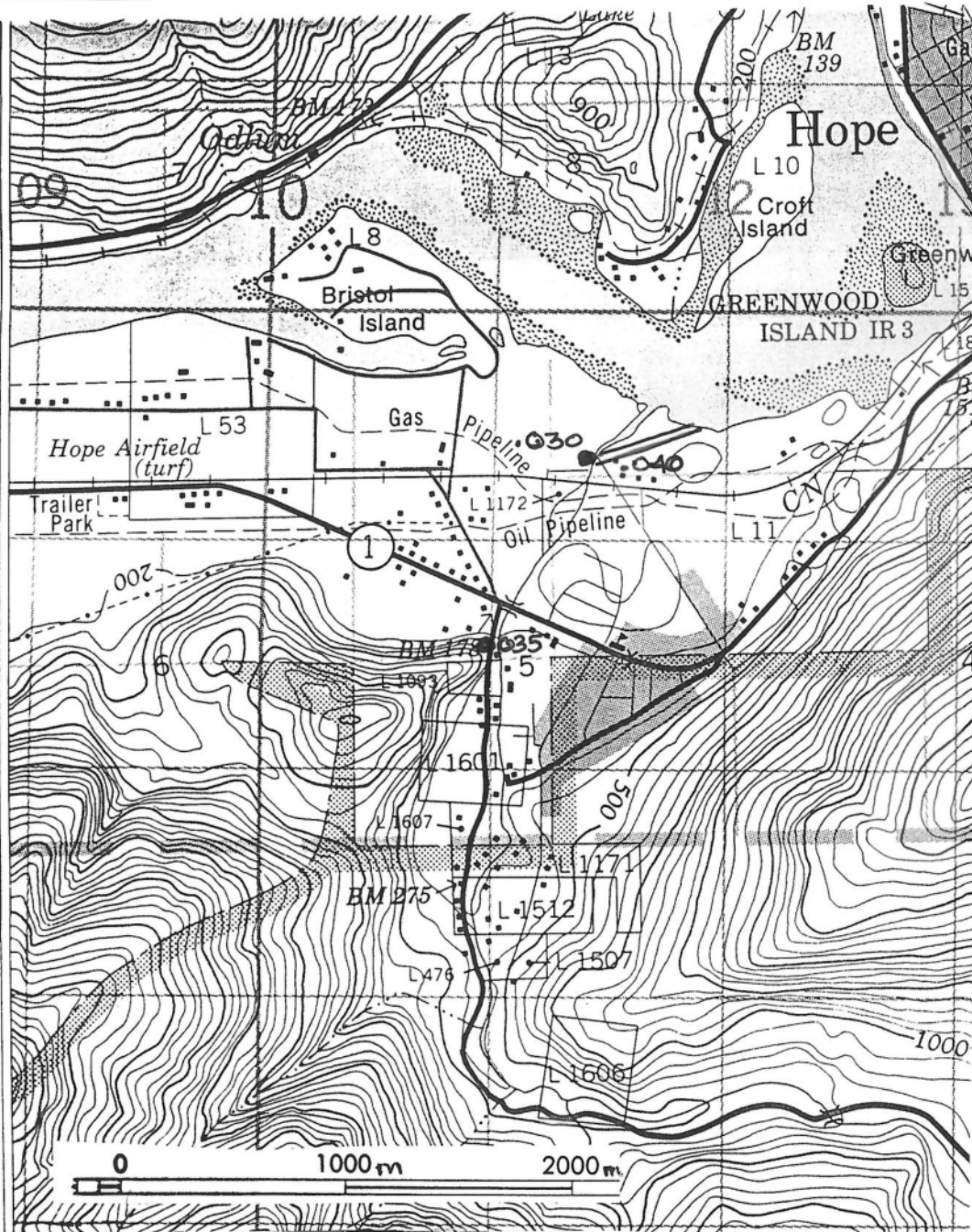
I have no concerns with the works.

P.C.L. Required

yes ☐no ☒_____
Signature

BC
Environment
LOWER MAINLAND REGION

10334 — 152 A Street
Surrey
British Columbia
V3R 7P8
Telephone: (604) 582-5200
Facsimile: (604) 660-8926



Location Map

NORTHWEST HYDRAULIC CO. INC.

[Name of applicant(s)]

July 18/96
[Date]

[Signature]
[Signature of applicant(s) or agent]

(FOR OFFICE USE ONLY)

[Date issued]

Appendix to Permit No.